Table 2 Growth performance, feed utilization and survival rate of juvenile Red tilapia *Oreochromis mossambicus* x O. niloticus (initial weight 0.9 g/fish) fed the experimental diets for 12 weeks. Values are mean  $\pm$  SD. Values followed by the same superscript letters in the same row are not significantly different (P > 0.05)

Items	Feeding rate (%)			
	1%	3%	5%	7%
IBW (g) <sup>1</sup>	$0.9 \pm 0.01$	$0.9 \pm 0.01$	$0.9 \pm 0.01$	$0.9\pm 0.01$
$FBW(g)^2$	$1.47 \pm 0.06^{\rm d}$	2.43±0.06°	$3.93\pm0.15^{a}$	$3.63\pm0.12^{b}$
$WG(g)^3$	$0.57 \pm 0.06^{\rm d}$	1.52±0.07°	$3.03\pm0.15^{a}$	$2.73\pm0.12^{b}$
$WG\left(\%\right)^{4}$	$63.3 \pm 6.4^{d}$	169.0±8.2°	337.7±17.3 <sup>a</sup>	218.3±12.7 <sup>b</sup>
SGR (%) <sup>5</sup>	$0.58 \pm 0.05^{d}$	1.18±0.04°	$1.76\pm0.05^{a}$	1.66±0.03 <sup>b</sup>
$FI(g)^6$	$0.81\pm0.03^{d}$	2.99±0.02°	$5.23\pm0.30^{b}$	$7.50\pm0.28^{a}$
FCR <sup>7</sup>	1.43±0.15 <sup>a</sup>	2.00±0.10 <sup>c</sup>	1.73±0.06 <sup>b</sup>	$2.73\pm0.15^{d}$
FER <sup>8</sup>	$0.70\pm0.06^{a}$	$0.51\pm0.02^{c}$	$0.58\pm0.02^{b}$	$0.36\pm0.03^{d}$
PER <sup>9</sup>	$2.10\pm0.16^{a}$	1.50±0.07°	1.71±0.05 <sup>b</sup>	$1.10\pm0.07^{\rm d}$
Survival (%) <sup>10</sup>	70.7±8.1 <sup>a</sup>	$82.0\pm10.1^{a}$	95.7±7.5 <sup>a</sup>	85.7±12.5 <sup>a</sup>

Note:  $^1$ : IBW (g) = initial body weight (g/fish);  $^2$ : FBW (g) = final body weight (g/fish);  $^3$ : WG (g), weight gain (g/fish) = FBW (g) -IBW (g);  $^4$ : WG(%), weight gain % = [FBW - IBW] × 100/ IBW);  $^5$ : FI (g), = amount of feed intake (g/fish);  $^6$ : Feed conversion ratio (FCR) = dry feed consumed/WG(g);  $^7$ : Feed efficiency ratio(FER)=WG/ dry feed consumed);  $^8$ : Protein efficiency ratio (PER)= (WG (g)/protein intake (g));  $^9$ : Specific growth rate (SGR day $^{-1}$ )= [In final BW - In initial BW] × 100/days);  $^{10}$ : Survival % =([no. of fish at the end of the experiment/no. of fish at the beginning of the experiment] × 100)